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1958 FOREIGN PREDATOR RELEASES AND FINDINGS

THROUGH AUGUST

by P. E. Buffam

LARICOBIVS ERICHSONII

RELEASES

Laricobius erichsonii was the first foreign predator to be received and released during the Spring of 1958. On May 20 400 L. erichsonii adults were released at Avery Park in Corvallis, and 400 L. erichsonii adults also were released at Black Rock by Wright and Mitchell. At Green River, Washington, on May 21, 400 L. erichsonii adults were released by Wright and Johnson. Wright and Rudinsky released 1200 Laricobius adults at Willamette Pass, Oregon, and 1380 adults at Avery Park on May 26. 1320 L. erichsonii adults were released at Coldwater Creek, Washington, and 1200 adults were released at Green River, Washington, by Wright on May 27. Wright released 1150 adults at Black Rock on May 28, and on May 30 he released 1150 adults at Wind River, Washington.

In total 8600 L. erichsonii adults were released in Oregon and Washington by areas as follows:

Avery Park	1780 adults
Black Rock	1550 "
Coldwater Creek	1320 "
Green River	1600 "
Willamette Pass	1200 "
Wind River	1150 "

FINDINGS

Laricobius erichsonii larvae were found preying on chermes on at least one tree per release area at all release points except Wind River. The population of chermes on the release tree at Wind River is almost entirely dead which could account for not finding L. erichsonii larvae present. The following is a record of the findings by areas:

Area	No. of trees on which found	No. of trees on which released	Date of last finding
Avery Park	one (also on several trees in vicinity)	two	7/8/58
Black Rock	two	two	7/7/58
Coldwater Creek	one	one	7/10/58
Green River	one	two	7/10/58
Willamette Pass	one	one	7/23/58
Wind River	0	one	----

On August 14 one larva and one adult were found feeding on chermes on one of the release trees at Green River. It is hoped that the adult belongs to this next year's overwintering brood as these beetles pupate in the soil, come back to the boles of trees to feed lightly on chermes as immature adults, and drop to the soil again to overwinter and mature. Through August 28 this is the only adult L. erichsonii to be found that doesn't belong to the original adults that were released. No explanation is available for the finding of the larva as Laricobius has only one generation per year.

APHIDECTA OBLITERATA

RELEASES

R. G. Mitchell released the first shipment of Aphidecta oblitterata (130 adults) on a grand fir on a farmer's woodlot one mile east of Corvallis on June 1. On June 6 Wright and Johnson released 230 Aphidecta adults on a Pacific silver fir at Green River. 265 more adults were released at Corvallis on June 14 on the same tree that the release of June 1 was made. The last release of A. oblitterata was made on June 20 at Green River. Ninety-five adults were free released on the same tree that the release of June 6 had been made. A total of 720 A. oblitterata were released in 1958 with 395 beetles being released at Corvallis and 325 beetles being released at Green River. 230

FINDINGS

The released adults of Aphidecta oblitterata were seen feeding vigorously on chermes at both release areas up to several weeks after being released. Only one larva and several eggs were found on the release tree at Green River, while the release tree at Corvallis showed no signs of A. oblitterata. On the release tree at Green River the eggs were found on lichens extended away from the surface of the bark. This may be a possible help in finding Aphidecta eggs in future studies.

NEOLEUCOPIS OBSCURA RELEASES AND FINDINGS

Only one shipment of Neoleucopis obscura was received and released this summer. Wright, Johnson, and Winjum released 700 N. obscura adults on a Pacific silver fir at Green River on June 6. No trace of eggs, larvae, puparia or adults has been seen since the release.

APHIDOLETES THOMPSONI

RELEASES

Four releases were made from this year's rearings of Aphidoletes thompsoni. A secluded spot in a young stand of grand fir near Benton-Lane Park was chosen to be the place of all four releases. The number of males and females and the dates of releases are as follows:

Release date	No. of males	No. of Females	Total
7/14	411	320	731
7/15	382	438	820
7/16	268	426	694
7/18	54	178	232
Totals	1115	1362	2477

FINDINGS

Seventeen days after the first release was made, A. thompsoni larvae were found to be fairly numerous on the bole. A month after the first release was made only a few larvae could be found. No larvae were found on the last date of observation which was August 19. It is thought that the larvae may have dropped to the litter for pupation. The litter and soil around the base of the tree are very hard which may very well hinder the Aphidoletes adults in leaving the litter and soil.

CREMIFANIA NIGROCELLULATA RELEASE AND FINDINGS

300 Cremifania nigrocellulata adults were released at the Willamette Pass on July 23 by Mitchell. Buffam released 85 Cremifania adults on the same tree on July 26. Three larvae were found on August 12, the first observation since the releases, but nothing has been found since then. The small size and light color of the larvae blend in well with the bole of the tree and the wax masses of the chermes and make observations very hard to make.

CHILOCORUS KUWANAE RELEASES AND FINDINGS

A shipment of 70 adult Chilocorus kuwanae was received on July 8 and placed on chermes-infested bark in the Sellwood laboratory. Although the beetles appeared to mate no eggs or larvae were found on the specimen. The beetles had not fed upon the chermes as observations showed the sistens to be intact several weeks after the release. The second shipment of C. kuwanae was released in a cage at Benton-Lane Park by Buffam on July 16. The shipment included 46 adults and 9 pupae. Later observations failed to reveal any signs of the Chilocorus feeding on chermes. The third shipment of these beetles (70 adults) was placed on a chermes infested bolt of Pacific silver fir at Sellwood laboratory on July 29. The beetles failed to show any signs of feeding. The fourth and last shipment of Chilocorus was taken to Coldwater Creek on August 28 and released freely. The results of the work of the 80 adults released will be studied later, although, from all outward appearances, this species seems unlikely to be of great significance in the natural control of chermes.

70
55
70
80
275

FINDINGS OF 1957 APHIDOLETES THOMPSONI RELEASES

In 1957 Aphidoletes thompsoni adults were released on four trees at Black Rock, one tree at Corvallis, one tree at Coldwater Creek, and two trees at Green River. The only larvae recovered this year were found on one of the trees at Green River. Numerous larvae of A. thompsoni have been found throughout August. 50 larvae were brought to the laboratory in Sellwood for rearing and identification purposes. R. G. Mitchell reports that on August 29 an adult emerged from a puparium to prove that these larvae collected are of A. thompsoni.

CONCLUSION

The most successful releases of foreign predators in 1958 have been made of Laricobius erichsonii and Aphidoletes thompsoni. Many larvae of each have been observed on the release trees. A few larvae of Cremifania nigrocellulata and a few eggs of Aphidecta oblitterata have been found. Neoleucopis obscura and Chilocorus kuwanae releases have yielded nothing, but it must be remembered that the tree on which we have found abundant Aphidoletes thompsoni larvae in 1958 was one of the trees on which we found no larvae after the 1957 releases.